

WHAT IS CLAIMED IS:

1. A casting receptable for processing melt, the casting receptable comprising:

a lid,

5 a shell, the bottom part of which is substantially in the shape of a cut cone and downwards convergent,

a filling opening at the bottom of the casting receptable,

a shutter plug that is movable in the vertical direction by means of an actuator and arranged to close and open the filling opening to allow melt to
10 enter and correspondingly exit the casting receptable,

and wherein the bottom end of the shutter plug is substantially a sharp cone in shape,

and the bottom end of the shutter plug extends in its closed position a distance further than the substantially conical bottom part of the shell, thus
15 forming a substantially sharp point at the bottom of the casting receptable, whereby the bottom part of the shell and the bottom end of the shutter plug form a substantially uniform conical outer surface.

2. A casting receptable as claimed in claim 1, wherein

the shutter plug comprises a sealing surface towards the inside of
20 the casting receptable, which in the closed position is arranged to settle against the sides of the filling opening,

and when the filling opening is being opened, the actuator is arranged to push the shutter plug downwards with respect to the filling opening so that a gap is formed between the sealing surface and the side of the filling
25 opening, from which melt can flow in or out of the casting receptable.

3. A casting receptable as claimed in claim 2, wherein

the casting receptable comprises at least one spring,

and the shutter plug is in the closed position arranged due to the springback force of the spring to press against the bottom end of the shell and
30 to thus provide compression stress to the casting receptable.

4. A casting receptable as claimed in claim 1, wherein

the shutter plug comprises a sealing surface which is arranged to settle against the sides of the filling opening inside the casting receptable,

and the actuator is arranged to pull the shutter plug upwards in rela-
35 tion to the filling opening so that a gap is formed between the sealing surface

and the filling opening, from which melt can flow in or out of the casting receptable.

5 5. A casting receptable as claimed in claim 1, wherein
outside the casting receptable, there is a first sensor that is arranged to indicate the immersion depth of the casting receptable into the melt.

6. A casting receptable as claimed in claim 1, wherein
inside the casting receptable, there is a second sensor that is arranged to indicate the level of the melt inside the casting receptable.

10 7. A casting receptable as claimed in claim 6, wherein
the elevation of the second sensor is adjustable.

8. A casting method comprising:
melting the metal to be cast in a melting furnace;
using protective slag on the surface of the melt in the melting furnace to protect the melt from the influence of the gases outside the melting
15 furnace;

using a closed casting receptable to transfer the melt from the melting furnace to the casting site, the bottom part of the casting receptable shell being a convergent substantially conical part and the bottom of the casting receptable having a filling opening that is opened and closed by means of a shutter plug that is movable in the vertical direction, and the point of the shutter plug is shaped substantially sharp so that when closed, the shutter plug forms together with the substantially conical bottom part of the casting receptable shell a substantially uniform conical outer surface at the bottom of the casting receptable;

20

25 eliminating harmful gases inside the casting receptable prior to filling the casting receptable;

immersing the casting receptable into the melt in the melting furnace by pushing the casting receptable through the protective slag to a predetermined depth;

30 moving the protective slag being in the movement of travel of the casting receptable and the possible impurities on the surface of the melt to the sides of the casting receptable, away from the bottom area of the casting receptable by the substantially sharp-pointed bottom of the casting receptable;

opening the filling opening by moving the shutter plug to allow the
35 melt in the melting furnace to flow into the casting receptable;

closing the filling opening by means of the shutter plug and transferring the casting receptable to the casting site;

connecting the filling opening of the casting receptable to a feed channel of the casting item in such a manner that the gases in the air space of the casting site cannot enter the feed channel;

removing the gases that react harmfully with the melt from the feed channel and casting mould before the filling opening is opened;

opening the filling opening by means of the shutter plug to allow the melt inside the casting receptable to flow into the feed channel and onwards to the casting mould.

9. A method as claimed in claim 8, comprising:

feeding shielding gas to a collar arranged around the feed channel to prevent the gases in the air space of the casting site from entering the feed channel after the casting receptable is arranged at the feed channel.

10. A method as claimed in claim 8, comprising:

arranging the casting receptable at the feed channel of a casting machine and flushing the feed channel, the feed cylinder of the casting machine, and the mould with the shielding gas before the filling opening of the casting receptable is opened.